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| 10/825,645 | 04/15/2004 | Chad Vos | 1160215.0531069 | 8422 |
| 26874 7590 02/03/2010 FROST BROWN TODD, LLC 2200 PNC CENTER 201 E. FIFTH STREET CINCINNATI, OH 45202 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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patents@fbtlaw.com

Office Action Summary

Application No.

10/825,645

Applicant(s)

VOS ET AL.

Examiner

SIMON KING

Art Unit

2614

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 17, 18, 20, 23, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 17, 18, 20, 23, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/28/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12, 17, 18, 20, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 7,027,586 by Bushey et al, hereinafter Bushey, in view of U.S. Pat. Appl. Publ. No. 2002/0083067 by Tamayo et al, hereinafter Tamayo.

Regarding claim 1, Bushey discloses a system (Figures 1 and 2; col. 5, line 43 – col. 7, line 16) for processing user inquiries (i.e. customer requests or services) (col. 7, lines 17-36), the system comprising:

a global knowledge database (i.e. agent data processor and interfaces; Fig. 2: 240, 250) including a plurality of categorized responses (i.e. communications modalities; attributes of an agent; various modes for transmitting and storing information including: voice, instant messaging sessions, email) (col. 5, lines 4-37) corresponding to a plurality of user inquiries (i.e. customer request for service; requested or identified communications modality) wherein each categorized response comprises at least one identifier (i.e. agent model; col. 5, lines 38-42) (col. 8, line 67 – col. 9, line 32; col. 11, lines 5-19; col. 12, lines 47-53);

a first response system (i.e. human agent; Fig. 1: 171, 172, 173) in communication with the global knowledge database (Fig. 2: 240, 250) (col. 8, line 58 – col. 9, line 3), the first response system configured to provide a first categorized response (i.e. voice, instant messaging sessions, email) included in the global knowledge database to a first user inquiry (i.e. customer

request for service; requested communications modality) (col. 9, lines 4-20; col. 11, lines 26-41), the first response system being of a first type of response system (col. 6, lines 43-53; col. 10, lines 40-46);

a second response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) in communication with the global knowledge database (Fig. 2: 240, 250) (col. 8, line 58 – col. 9, line 3), the second response system configured to provide a second categorized response (i.e. communications modalities; attributes of an agent; various modes for transmitting and storing information including: DTMF modality, speech recognition) included in the global knowledge database to a second user inquiry (i.e. customer request for service; requested communications modality) (col. 9, lines 4-20; col. 11, lines 26-41), the second response system being of a second type of response system (col. 6, lines 29-41 and lines 54-61; col. 10, lines 40-46);

an analysis database (i.e. match processor; Fig. 2, 270) configured to store and analyze first data (i.e. match scores) relating to the categorized responses provided by the first response system and the second response system, and second data (i.e. retrieved agent models) relating to the identifiers of the first response and the second response (col. 9, lines 33-41); and a report generator (i.e. routing processor; Fig. 2, 280) configured to generate an interactive report (i.e. a list of best matched agents) using the data stored in the analysis database, wherein the report comprises a plurality of categories, wherein each category corresponds to a response system (i.e. agent), a categorized response (i.e. modality), an identifier of a categorized response (i.e. agent models), or a combination thereof (col. 9, line 42 – col. 10, line 11).

Bushey does not disclose means for generating a recommendation based on the report.

Tamayo discloses a system (Fig. 1) for processing user inquiries, the system comprising:

- (a) a global knowledge database (Fig. 3, 304; Fig. 4, 402; DBMS (Database Management System)) including a plurality of categorized responses (i.e. data) corresponding to a plurality of user inquiries (i.e. queries) wherein each categorized response comprises at least one identifier (i.e. user making request) (section 0042, 0045, 0046);
- (b) a first response system (i.e. user system; Fig. 1, 102; Fig. 3, 312; Fig. 4, 412) in communication with the global knowledge database, the first response system configured to provide a first categorized response (i.e. data response) included in the global knowledge database to a first user inquiry (i.e. user request or query), the first response system being of a first type of response system (i.e. a personal computer system) (section 0042);
- (c) a second response system (i.e. another user system; Fig. 1, 102; Fig. 3, 312; Fig. 4, 412) in communication with the global knowledge database, the second response system configured to provide a second categorized response (i.e. data response) included in the global knowledge database to a second user inquiry (i.e. another user's request or query), the second response system being of a first type of response system (i.e. a second personal computer system) (section 0042);
- (d) an analysis database (Fig. 1, 108; Fig. 8: 822, 824) configured to store and analyze (i.e. data mining) first data relating to the categorized responses (i.e. data responses) provided by the first response system and the second response system, and second data relating to the identifiers (i.e. customer or user) of the first response and the second response (section 0042; 0058); and
- (e) a report generator (Fig. 1, 108; Fig. 8: 822, 824) configured to generate an interactive report (i.e. data mining results including: customized and personalized information) using the data stored in the analysis database, wherein the report comprises a plurality of categories, wherein

each category corresponds to at least one of: a response system, a categorized response, and an identifier of a categorized response (section 0058; 0068); and wherein the report comprise at least one recommendation regarding at least one response system (i.e. recommendation engine), wherein the recommendation is selected from the group consisting of change a business process, change a specified response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, and do not change the business process (section 0061-0066; 0069-0071; 0084).

Again, Bushey discloses the claimed system except Bushey does not disclose means for generating a recommendation based on the report. However, the claimed feature of generating a recommendation based on the report was old and well known in the art. Tamayo clearly teaches such concept.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bushey to include means for generating a recommendation based on the report as taught by Tamayo. In other words, one of ordinary skill in the art would have been lead to make such a modification of Bushey to include means for generating a recommendation based on the report, such as the means for generating a recommendation of Tamayo, to the system of Bushey so the system of Bushey can provide recommendations on how to process user inquiries based on the report.

Regarding claim 2, the system of claim 1, wherein Bushey discloses the identifiers are selected from the group consisting of response identifiers, system identifiers (i.e. agent models), customer identifiers, inquiry identifiers, time identifiers, activity identifiers, status identifiers, model identifiers, vendor identifiers, and outcome identifiers (col. 8, line 58 – col. 9, line 55).

Regarding claim 3, the system of claim 1, wherein Bushey discloses the first response system comprises a live-agent response system (i.e. human agent; Fig. 1: 171, 172, 173) (col. 6, lines 43-53; col. 9, lines 4-20; col. 11, lines 26-41).

Regarding claim 4, the system of claim 1, wherein Bushey discloses the second response system comprises an automated response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) operable to communicate with the knowledge database independent of the first response system (i.e. human agent; Fig. 1: 171, 172, 173) (col. 6, lines 29-41 and lines 54-61; col. 9, lines 4-20; col. 11, lines 26-41).

Regarding claim 5, the system of claim 1, wherein Bushey further comprising: a user information database (i.e. database; internal resources) configured to store user information; wherein the first response system is configured to retrieve information from the user information database in responding to the first user inquiry (col. 6, line 62 – col. 7, line 16).

Regarding claim 6, the system of claim 1, wherein Bushey discloses the first response system (i.e. human agent; Fig. 1: 171, 172, 173) and the second response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) are distributed (col. 6, lines 29-61).

Regarding claim 7, the system of claim 1, wherein Bushey discloses the first response system (i.e. human agent; Fig. 1: 171, 172, 173) and the second response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) are integrated (col. 6, line 62 – col. 7, line 10; col. 8, line 58 – col. 9, line 3).

Regarding claim 8, the system of claim 1, wherein Bushey discloses the global knowledge database further comprises a plurality of templates (i.e. information related to products and services) for responding to inquiries from users (col. 6, line 62 – col. 7, line 10; col. 10, line 23-40).

Regarding claim 9, the system of claim 1, wherein Bushey discloses the first response system (i.e. human agent; Fig. 1: 171, 172, 173) is configured to use a first of the plurality of templates (i.e. information related to products and services) to respond to the first user inquiry and wherein the second response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) is configured to use the first of the plurality of templates (i.e. information related to products and services) to respond to the second user inquiry (col. 6, line 62 – col. 7, line 10; col. 10, line 23-40).

Regarding claim 10, the system of claim 9, wherein Bushey discloses the first system comprises a live agent response system (i.e. human agent; Fig. 1: 171, 172, 173) and the second response system comprises an automated response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) (col. 6, lines 29-61).

Regarding claim 11, the system of claim 1, wherein Bushey further comprising an analysis engine (i.e. agent data processor; Fig. 2, 250), wherein the analysis engine is configured to determine the number of times a categorized response is generated by the first response system (col. 9, lines 4-60; col. 11, lines 5-41).

Regarding claim 12, the system of claim 1, wherein Bushey further comprising an analysis engine (i.e. agent data processor; Fig. 2, 250), wherein the analysis engine is configured to updated the analysis database (i.e. match processor; Fig. 2, 270) when a categorized response is generated by the first response system (col. 9, lines 4-60; col. 11, lines 5-41).

Regarding claim 17, Bushey discloses a system (Figures 1 and 2; col. 5, line 43 – col. 7, line 16) for processing user inquiries (i.e. customer requests or services) (col. 7, lines 17-36), the system comprising:
a first response system (i.e. human agent; Fig. 1: 171, 172, 173) configured to provide a first

categorized response (i.e. voice, instant messaging sessions, email) to a first user inquiry (i.e. customer request for service; requested communications modality) (col. 9, lines 4-20; col. 11, lines 26-41),

wherein the first categorized response comprises at least one identifier (i.e. agent model; col. 5, lines 38-42) (col. 8, line 67 – col. 9, line 32; col. 11, lines 5-19; col. 12, lines 47-53), the first response system being a first type of response system (col. 6, lines 43-53; col. 10, lines 40-46); a second response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) configured to provide a second categorized response (i.e. communications modalities; attributes of an agent; various modes for transmitting and storing information including: DTMF modality, speech recognition) to a second user inquiry (i.e. customer request for service; requested communications modality) (col. 9, lines 4-20; col. 11, lines 26-41) independent of the first response system (i.e. human agent; Fig. 1: 171, 172, 173) (col. 6, lines 29-41 and lines 54-61; col. 9, lines 4-20; col. 11, lines 26-41),

wherein the second categorized response comprises at least one identifier (i.e. agent model; col. 5, lines 38-42) (col. 8, line 67 – col. 9, line 32; col. 11, lines 5-19; col. 12, lines 47-53), the second response system being a second type of response system (col. 6, lines 29-41 and lines 54-61; col. 10, lines 40-46);

a global knowledge database (i.e. agent data processor and interfaces; Fig. 2: 240, 250) configured to communicate with the first response system and the second response system, wherein the first categorized response and the second categorized response are both stored in the global knowledge database (col. 8, line 58 – col. 9, line 3);

an analysis database (i.e. match processor; Fig. 2, 270) configured to store and analyze data (i.e. match scores; retrieved agent models) related to the categorized responses (i.e. modalities), the response systems (i.e. agents), and the identifiers (i.e. agent models) (col. 9,

lines 33-41); and

a report generator (i.e. routing processor; Fig. 2, 280) configured to generate a report (i.e. a list of best matched agents) based on the data analyzed by the analysis database, wherein the report comprises at least one recommendation (i.e. best match) regarding at least one response system (i.e. agent) (col. 9, line 42 – col. 10, line 11).

Bushey does not disclose wherein the at least one recommendation is selected from the group consisting of change a business process, change a response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, and do not change the business process.

Tamayo discloses a system (Fig. 1) for processing user inquiries, the system comprising:

(a) a first response system (i.e. user system; Fig. 1, 102; Fig. 3, 312; Fig. 4, 412) configured to provide a first categorized response (i.e. data response) to a first user inquiry (i.e. user request or query), wherein the first categorized response comprises at least one identifier (i.e. user making request), the first response system being a first type of response system (i.e. a personal computer system) (section 0042);

(b) a second response system (i.e. another user system; Fig. 1, 102; Fig. 3, 312; Fig. 4, 412) configured to provide a second categorized response (i.e. data response) to a second user inquiry (i.e. another user's request or query) independent of the first response system, wherein the second categorized response comprises at least one identifier (i.e. user making request), the second response system being a first type of response system (i.e. a second personal computer system) (section 0042);

(c) a global knowledge database (Fig. 3, 304; Fig. 4, 402; DBMS (Database Management System)) configured to communicate with the first response system and the second response

system (section 0042, 0045, 0046);

(d) an analysis database (Fig. 1, 108; Fig. 8: 822, 824) configured to store and analyze data (i.e. data mining) related to the categorized responses (i.e. data responses), the response systems, and the identifiers (i.e. customer or user) (section 0042; 0058); and

(e) a report generator (Fig. 1, 108; Fig. 8: 822, 824) configured to generate a report (i.e. data mining results including: customized and personalized information) based on the data analyzed by the analysis database (section 0058; 0068), wherein the report comprises at least one recommendation regarding at least one response system, wherein the at least one recommendation is selected from the group consisting of change a business process, change a response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, and do not change the business process (section 0061-0066; 0069-0071; 0084).

Again, Bushey discloses the claimed system except Bushey does not disclose the at least one recommendation is selected from the group consisting of change a business process, change a response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, do not change the business process, and any recommendation related thereto. However, the claimed feature of the at least one recommendation is selected from the group consisting of change a business process, change a response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, do not change the business process, and any recommendation related thereto was old and well known in the art. Tamayo clearly teaches such concept.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bushey to include the at least one recommendation is selected from the group consisting of change a business process, change a response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, do not change the business process, and any recommendation related thereto as taught by Tamayo. In other words, one of ordinary skill in the art would have been lead to make such a modification of Bushey to include the at least one recommendation is selected from the group consisting of change a business process, change a response system, send this type of transaction to a specified response system, enhance a handling of a customer contact, automate the response to the customer, do not change the business process, and any recommendation related thereto of Tamayo, to the system of Bushey so the system of Bushey can provide recommendations on how to process user inquiries based on the report.

Regarding claim 18, the system of claim 17, wherein Bushey discloses the second response system comprises an automated response system (i.e. interactive voice response unit or automated agent; Fig. 1: 160, 161) operable to communicate with the global knowledge database independent of the first response system, and wherein the first response system comprises a live agent response system (i.e. human agent; Fig. 1: 171, 172, 173) (col. 6, lines 29-41 and lines 54-61; col. 9, lines 4-20; col. 11, lines 26-41).

Regarding claim 20, the system of claim 17, wherein Bushey in view of Tamayo discloses wherein the selection of a recommendation from the report (Bushey: i.e. best match) causes a display of linked additional data (Bushey: i.e. additional agents may be added to the list and allowed to service the customer while the selection is pending) (Bushey: col. 9, line 42 – col. 10, line 11; Tamayo: section 0058; 0061-0066; 0069-0071).

Regarding claim 23, the system of claim 17, wherein Bushey discloses the report comprises an overlaid contact graph (i.e. a list with best matched agents) comprising a plurality of shapes (i.e. pointer, entry), wherein each shape comprises dimensions corresponding to the data (i.e. agents, agent models, modalities) stored in the analysis database (col. 9, line 42 – col. 10, line 11; Fig. 5; col. 12, lines 13-46).

Regarding claim 25, a method for managing user inquiries, the method comprising: (a) receiving an inquiry from a user; (b) retrieving a categorized response to the user inquiry from a global knowledge database, wherein: (i) the global knowledge database includes a plurality of categorized responses; (ii) each categorized response from the plurality of categorized responses comprises at least one identifier; (c) via a response system, providing the categorized response retrieved from the global knowledge database to the user; (d) storing an identifier of the categorized response provided to the user in an analysis database; (e) storing an identifier of the response system in the analysis database; and (f) generating a report using the identifiers stored in the analysis database; wherein the report comprises an overlaid contact graph comprising a plurality of shapes, wherein each shape from the plurality of shapes has at least one dimension corresponding to data stored in the analysis database (see rejection for claim 1 and 17).

As for claim 26, wherein generating the report comprises generating the overlaid contact graph using a means for generating an overlaid contact graph (see rejection for claim 20).

Response to Arguments

3. Applicant's arguments filed 12/23/2009 have been fully considered but they are not persuasive. Applicant states that prior art Bushey does not teach a global knowledge database , nor providing categorized responses from such a database to customer inquires. Examiner

respectfully disagree, from cited figure 2, clearly shows that Agent Data processor 250 connected to a Database 230, which provides categorized response as according to per customer request for service and identification for communication modality. Each modality is categorized in various modes such as: voice, instant messaging session, email. Furthermore, applicant states that treating "categorized response" is taught by a "data response" is improper. Examiner respectfully disagree, the database stores the categorized response as according to each modality, the corresponding response as to which categorized modality is detected by the Agent Interface with database and the corresponding categorized response is assigned as accordingly. Furthermore, applicant states that prior art does not teach or suggest determining the number of times a categorized response is generated by a response system, Examiner respectfully disagree, from the previous office action as cited (col 9, ln-4-60: col 11. ln 5-41) clearly teaches that a match processor detects customer profile and compare as to agent model. Also including threshold and scores as a best match for each assigned agent. Clearly the concept of "number of times a categorized response is generated" is clearly teach because the system has already know how many times the agent has been assigned as accord to each score as per match with the assigned agent. Furthermore, applicant states that prior art does not teach where "an overlaid contact graph comprising a plurality of shapes, wherein each shape comprises dimensions corresponding to the data stored in the analysis database". Examiner respectfully disagree, as cited from office action, prior art Bushey teach where a list with matched agents and with pointer and entry as according to each agents, agent models and modalities.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KING whose telephone number is (571)270-1950. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FAN TSANG can be reached on (571)272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 29, 2010

/SIMON KING/
Examiner, Art Unit 2614

/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614